

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 11, line 21 as follows:

In the simulation, a source of pollution is generating a gradient of pollution measurement with a circular shape. The focus of the simulation is to determine how well this circular area of pollution can be characterised by data collected by the network in a finite time, with finite resources of buffer memory and battery energy. During such an experiment, a minority of the sensor devices will use up all their battery energy and become useless in terms of taking measurements and relaying data. The 'perfect' result that a network could achieve is reporting data on 100% of the area in which there is pollution. The success of the data gathering does not refer to the quantity of data packets arriving at the sinks/base-stations, but on the proportion of the area of polluted water for which data has been received. Results quoted are each averages of ten simulations, for which the size and position of the pollution area varies, as do the positions of the fixed sinks/base-stations, and the motions of the forty-eight mobile sensor devices. Initially two routing protocols were used, one (represented in the results 41,43) corresponds to the routing protocol discussed in the patent application GB0321096.0 (serving as priority application for WO 05/025147), and the other routing protocol (results 42,44) is a variant of it. Each routing protocol is used with a constant sensing rate (41,42) and a responsive sensing rate according to the invention (43,44). As explained above, the measure of success is the proportion of polluted water area that is characterised by the end of the data-gathering experiment, which is given as a fraction on the left hand axis, with 0.95 meaning 95%. The results are tabulated below, and represented graphically in FIG. 4.